FCC Docket Number
WC Docket No. 02-60

FCC Pilot Program Quarterly Report
October - December 2008
Erlanger Health System

1. Project Contract and Coordination Information
a.b. Identify the project leader(s) and respective business affiliation

a. Project Coordinator

Douglas Fisher
VP Government & Community Affairs
Erlanger Health System
975 East Third Street
Chattanooga TN 37403
423-778-9642
douglas.fisher@erlanger.org

b. Associate Project Coordinator

Hale Booth
Executive Vice President
BrightBridge (formally Southeast Development Corporation)
PO Box 871
Chattanooga, TN 37401
423-667-2077
hbooth@afgnmtc.com
Fax 423-424-4262

c. Responsible organization

Erlanger Health System
975 East Third Street
Chattanooga TN 37403

d. Coordination throughout the state or region.

Erlanger Health System management has continued periodic discussions with other health care providers across the region regarding how the

system will be structured to meet specific needs of the individual health care providers. In addition, Erlanger staff members have continued periodic communication with another pilot grant recipient in Tennessee, to coordinate the projects and thus insure there is no overlap or duplication of service.

2. Identify all health care facilities included in the network.

The network is in the process of being formalized at this time and discussions are underway with various partners and some potential new partners or future partners. The network is expected to evolve over time as circumstances change. Therefore the facilities listed below are primarily the same as those proposed in the application, with the previously reported deletion of Woods Memorial Hospital in McMinn County which has been sold to a private group and changed from a non-profit to a for profit hospital, since the application was submitted. Should Woods seek to remain in the otherwise non-profit network, an appropriate cost structure will be developed for their proportional share of system development and O&M costs. Hutcheson Medical Center, a non-profit hospital, in Fort Oglethorpe Georgia will be invited to join the initial network, because it can be incorporated at little additional expense.

Copper Basin Medical Center 144 Medical Center Drive Copperhill TN 37317 RUCA Code 10 Census tract 9504 Contact David Hyatt, CEO 423-496-5511	Public, non-profit eligible
Erlanger Bledsoe 128 Wheeler Town Road Pikeville, TN 37367 RUCA Code 10 Census Tract 9531 Contact Douglas Fisher, 423-778-9642	Public non-profit eligible
Erlanger Baroness 975 East Third Street Chattanooga, TN 37403 RUCA Code 1 Census tract 4 Contact Douglas Fisher 423-778-9642	Public non-profit eligible
Erlanger North 632 Morrison Springs Road Red Bank TN 36415 RUCA Code 1	Public non-profit eligible

Census Tract 109 Contact Douglas Fisher 423-778-9642	
Hutcheson Medical Center 100 Gross Crescent Circle Fort Oglethorpe, GA 30742 RUCA Code 1 Census tract 307 Contact 706-858-2000	Public non-profit eligible
North Valley Medical Center 723 Rankin Avenue (US 127) Dunlap TN RUCA Code 10 Census Tract 601 Contact: Bill Harmon, 423-949-5100	Private For-profit eligible (Dedicated emergency department)
Rhea Medical Center 9400 Rhea County Highway Dayton TN 37321 RUCA Code 8 Census tract 9752 Contact; Ken Crooms 423-775-1121	Public non-profit eligible
Erlanger Womans/Erlanger East 1755 Gunbarrell Rd Chattanooga, TN 37421 RUCA Code 1 Census Tract 114.41 Contact; Douglas Fisher 423-778-9642	Public non-profit eligible
Murphy Medical Center 4130 U.S. Highway 64, East Murphy North Carolina 28906 RUCA Code 9 Census tract 9906 Contact: Mike Stevenson CEO, 828-835-7502	Public non-profit eligible

3. Network Narrative:

The competitive bidding process has not been initiated, so this section is not applicable.

4. List of connected health care providers.

Not applicable at this time.

5. Identify the following non-recurring and recurring costs, where applicable show both as budgeted and actual incurred for the applicable quarter and funding year to date.

	Budgeted	incurred
a. Network design	55,000	0
b. Network equipment	361,696	0
c. Infrastructure deployment		
i. Engineering	35,000	0
ii Construction	2,023,304	0
d. Internet2, NLR	0	0
e. Leased facilities	0	0
f. Network management, maintenance, O&M	0	0
g. other	111,600	0
Total	2,586,600	0

While the total remains the same as the submitted Pilot project application, these line item expenses are changed to reflect a decrease in construction because of the expected deletion of Woods Hospital in McMinn County and the addition of network equipment expense by Erlanger Health System. Formal approval of these line item changes has not been requested, however this quarterly report reflects current planning.

6. Describe how costs have been apportioned and the sources of the funds to pay them.

a. Explain how costs are identified, allocated among and apportioned to both eligible and ineligible network participants.

We are presently identifying reasonable and equitable system costs and equitable methods to apportion these costs to participants. The network will initially only serve eligible participants. If ineligible participants, seek to become a part of the initial system, this issue will be addressed with the funding agency.

b. Describe the source of funds from:

i. **Eligible pilot program network participants**.

The initial matching funds contribution for assistance in network construction from the local non-profit Electric Power Board was considered ineligible by the FCC Order issued on November 19,

2007. As a result a range of alternatives have been considered for alternative sources of funds. At this time Erlanger Health System is planning to seek approval of network equipment capital funds budgeted by the hospital for this project. Until the network is fully defined, the role and possible amounts of financial participation by eligible network participants has not been established.

ii. Ineligible network participants.

Not applicable.

c. Show contributions from all other sources

i. Identify source of financial support and anticipated revenues paying for costs not covered by the fund and by pilot program participants.

Erlanger Health System is incurring costs for planning and project administration assistance. These costs are not covered by the grant and are being paid directly by Erlanger Health System. Grant eligible costs are not being incurred at this time until system planning is completed. However, the need for operating equipment to interface with the FCC funded fiber network is an essential component not funded by the FCC grant. Erlanger Health System applied for telemedicine equipment funding in April 2008 from the USDA Rural Development Distance Learning Telemedicine program. This funding request was for non-FCC eligible network equipment to be located in rural Copper Basin Medical Center in Copperhill, Rhea County Medical Center in Dayton, Erlanger Bledsoe in Pikeville, North Valley Medical Center in Dunlap and Erlanger Baroness in Chattanooga. On September 2, 2008 Erlanger Health System was notified that USDA was awarding Erlanger Health System $352,000 to fund this needed equipment for the pilot program.

One of the key needs that emerged out of initial network conversation with Copper Basin Medical Center involved tele-radiology. They are the only hospital in the first phase of the pilot project without a PACS or digital imaging system, from which imagery can be transmitted over the FCC funded network. A commitment of federal funding through the Appalachian Regional Commission has been secured to assist with the purchase of a portion of the PACS system, for Copper Basin Medical Center. The balance of funding for this needed system is included in the

previously mentioned USDA Rural Development Distance Learning Telemedicine grant awarded to Erlanger by the USDA in September.

On September 30, 2008, Erlanger Health System in partnership with Meigs County government, submitted a grant request through the State of Tennessee to the Appalachian Regional Commission for $377,500 in ARC funds to expand the planned pilot network. These proposed funds would pay for additional fiber construction and telemedicine equipment needed to serve public health department facilities in McMinn and Meigs County Tennessee. Public health departments in the Erlanger catchment area have expressed an interest in participating in the network and it appears that with minor modifications, most rural health department locations can be accessed at little if any extra project expense. The Meigs and McMinn County health departments are exceptions, as they are not easily accessible and will require substantial additional fiber in order to serve these locations. Meigs County's health department is the only facility in this rural medically underserved county which provides primary health care and the ability to deliver telemedicine services to this remote facility would greatly improve access to tertiary care. Decisions on this grant application will not be known till late spring of 2009.

Concurrently other local sources of gap financing are being explored to meet unfunded system needs not eligible for the pilot program grant. As an example of this, during the current reporting quarter, project staff began the process of seeking ARC funding in North Georgia to cover the cost of extending fiber to additional hospitals in the service catchment area. During the next quarter, staff will seek additional funding for remote telemedicine equipment in north Georgia and western North Carolina.

ii. Identify the respective amounts and remaining time for such assistance.

The total FCC project budget submitted is $2,586,600. The source of funding is $2,198,610 from the FCC pilot grant and $387,990 from Erlanger Health System, with a large portion of Erlanger's matching funds being used for purchase of network equipment necessary to manage and operate the fiber network. $361,696 of this Erlanger match has been budgeted for network equipment in the new EHS budget effective July 1, 2008. The remaining $26,294 in Erlanger matching funds will be budgeted in the next fiscal year during which the third year proration of FCC pilot funds will be available.

Regarding the FCC ineligible equipment expenses discussed in 5 c. i. above, the Copper Basin Medical Center has been awarded an ARC grant for $260,884, for equipment funding. A large portion of this 50 percent matching grant will be used to purchase a PACS electronic imaging system which will provide medical digital images for transmittal over the FCC Pilot network to specialists at other hospitals. Other portions of this ARC grant have already been invested in unrelated equipment and the remainder budgeted for the PACS system is anticipated to be drawn down and expended over the next 9 months as equipment is purchased.

Erlanger Health System has also been awarded $352,000 in grant funding through USDA Rural Development Distance Learning and Telemedicine program. The funds will be used to purchase imaging equipment for rural hospitals in the network to allow them to use the FCC funded fiber network. Equipment proposed for purchase includes, the remainder of funding for the PACS system for Copper Basin Medical Center, remote telemedicine stations for deployment at rural hospitals and portable video conferencing stations (2) at Erlanger Baroness which will be located in the children's hospital and the Level 1 Trauma Center. These Rural Development funds are expected to be drawn down as equipment is purchased over the next 9 months.

d. Explain how the selected participant's minimum 15 percent contribution is helping to achieve both the selected participant's identified goals and objectives and the overarching goals of the pilot program.

Erlanger Health System is planning the deployment of the FCC Rural Fiber Network from the inside of their health system out to the rural partners. As part of this systemic process, Erlanger has identified necessary equipment capacity needs for a video bridge/hub for the network that can grow with the network over time. Erlanger has budgeted funds for this which will be requested for approval as part of the project local match provided by Erlanger. This is a significant investment in the future of the network by Erlanger Health System and it comes at a increasingly difficult time in the national economic cycle when Erlanger has provided approximately $85,000,000 in uncompensated care to the community and is going through a necessary period of financial austerity. This investment along with the FCC Pilot grant supports Erlanger Health System's role as a regional tertiary care provider and a strong partner for the growth of healthcare services in rural communities. It also

positions EHS to grow the network into a component of a future national healthcare fiber network.

7. **Identify any technical or non-technical requirements or procedures necessary for ineligible entities to connect to the participant's network.**

   At this time, no plans have been developed for ineligible entities to connect to the network, so this question is not currently applicable.

   Erlanger Health System does want to define any issues around ineligible entities i.e. medical practices and doctor groups interfacing through Erlanger's hub/network terminus with data carried on the pilot network. This is important to the long term success of the system as the local public Electric Power Board (EPB) is currently investing over $200,000,000 to extend high speed fiber to all of their 163,000 customers throughout their 600 square mile urban service area which is where the vast majority of tertiary care medical specialists are located. Their ability to link to the hub or terminus of the network at Erlanger through EPB's network is vital to the long term success of the project and probably critical to the ability of the network to respond effectively in a crisis or emergency.

8. **Provide an update on the project management plan, detailing:**

   a. **The project's current leadership and management structure and any changes to the management structure since the last data report.**

      Current leadership for the project continues to be provided by Douglas Fisher, Erlanger Vice President for Government and Community Affairs (Project Coordinator), and Hale Booth, Executive Vice President, Southeast Development Corporation (Associate Project Coordinator).

   b. **In the first quarterly report, the selected applicant should provide a detailed project plan and schedule. The schedule must provide a list of key project deliverables or tasks, and their anticipated completion dates. Among the deliverables, participants must indicate the dates when each health care provider site is expected to be connected to the network and operational. Subsequent quarterly reports should identify which project deliverables, scheduled for the previous quarter, were met, and which were not met. In the event a project deliverable is not achieved, or the work and deliverables deviate from the work plan, the selected participant must provide an explanation.**

	Original Date	Revised Date
STRUCTURE		
Documentation of commitment of network partners	10/15/08	3/15/09
NETWORK DESIGN		
Competitive bidding of network design	11/15/08	5/15/09
Review, recommendation and bid award	1/15/09	6/15/09
Network design phase services	6/15/09	10/15/09
NETWORK EQUIPMENT		
Bid specifications for video bridge/network hub equipment	2/15/09	5/15/09
Competitive bidding of video bridge/network hub equipt.	3/15/09	6/15/09
Review, recommendation and bid award	4/30/09	7/15/09
Installation of equipment	9/15/09	12/15/09
CONSTRUCTION		
Environmental compliance and rights of way documentation with electric cooperatives, power boards, and other existing partners	6/15/09	10/15/09
Bid specification document	6/15/09	10/15/09
Review and approvals of bid documents	7/30/09	11/30/09
Competitive bidding of fiber construction and installation	8/15/09	1/15/10
Review, recommendation and bid award(s) for construction	9/30/09	2/30/10
Preconstruction conference	10/15/09	3/15/10
Notices of start of construction	10/15/09	3/15/10
Construction & inspection completion	8/15/10	1/15/11
Construction completion and network testing	9/15/10	2/15/11
NON-FCC FUNDED EQUIPMENT		
Preparation of bid specifications for non-FCC project equipment	10/30/08	3/30/09
Competitive bidding of non-FCC project equipment	11/30/08	4/30/09
Review, recommendation and bid awards	01/30/09	6/15/09
Acquisition and installation of non-FCC project equipment at health care provider sites	06/30/09	9/15/09
Completion of testing of equipment (leased lines)	06/30/09	9/15/09
PROJECT CLOSEOUT		
System operational	9/15/10	2/15/11
Project closeout	10/15/10	3/15/11
Reporting	on-going	on-going

Schedule for connecting each site to the network and operational:

All health care provider sites will be connected to the planned network and operational by 2/15/11.

Some sites will be connected and operational sooner. However, since this project involves the installation of fiber over miles of routes dictating a precise schedule for service by site will, based upon prior experience, result in a higher construction cost in competitive bidding. Therefore the timing and priority of site connections will be negotiated after bid award based on site needs at that time and contractor mobilization issues.

Schedule Changes:

This schedule reflects the original schedule submitted and the new revised schedule. It has been necessary to extend the schedule as Erlanger Health System has needed more time to plan how healthcare services will be delivered over the network. EHS has also been investing considerable time in developing a basic strategy for the sustainability of the network to accommodate concerns for maintaining the economic viability of the network over time while properly observing USAC and FCC programmatic concerns This has taken more time than originally estimated and the options that are being considered are fundamental to how the system will be ultimately bid. As a result this has slowed the facility planning process.

USDA funded equipment schedule estimates are being prepared and will be included in the next quarterly report. Sites selected will provide an excellent beta evaluation for the ultimate system because not only will equipment be thoroughly vetted, processes and procedures will be tested and expanded if needed.

9. **Provide detail on whether network is or will become self sustaining. Selected participants should provide an explanation of how network is self sustaining.**

To be successfully sustained, a regional telemedicine network must meet the clinical, educational and economic needs of all participants. Erlanger Health System views the project as an opportunity to not only partner with member hospitals, but perhaps more importantly reach out to physicians and distant communities as well. We are utilizing an extensive collaborative needs assessment to ensure that what we offer and communicate to our members is precisely what is needed to extend care access and offer programs not yet available because of sparse or dispersed populations. Early work to determine needs included visits to hospital administrators and discussions with county officials. We continue exploring opportunities to partner with target community health and wellness agencies to pursue both State and Federal funds for initiatives that target maternal/fetal health, children's health, and improvement of critical disease states such as diabetes, stroke, obesity, cancer and COPD. Working with the agencies, we will also develop community- based health initiatives supported

by the increased access to specialists and educational opportunities provided by telemedicine.

Sustainability and long term growth will be enhanced by the creation of an ongoing flow of data between network sites which will quickly demonstrate the benefit to physicians, patients and providers. We will market the identified benefits using a mix of both internal and external communications initiatives which will include community and regional media highlighting stories and initiatives indicating how telemedicine saves time, money and lives. Keeping staff and physicians informed about telemedicine will help create understanding and enable them to ensure patients understand and value benefits. Our intent is to develop an effective and innovative demonstration of the potential of broadband- to- the- home for remote monitoring of patients to help minimize costly and stressful hospital stays.

As the teaching hospital for the University Of Tennessee College Of Medicine Chattanooga (UTCOM), Erlanger will work with rural hospitals and UTCOM to encourage research initiatives that will leverage benefits of the network and positively impact heath disparities.

Based on data obtained from existing networks, a key focus area for long-term sustainability will be to ensure appropriate and timely reimbursement for all services to providers and physicians. Our research indicates that most systems begin sustainable operations two to two and one half years after start up. Successful systems closely collaborate, communicate and continually share updated data related to processes required for reimbursement from Medicare, Medicaid and third party payers.

Because the network infrastructure is being developed in phases, we will aggressively attempt to build on our ongoing efforts to acquire grants from state and federal funds, not -for- profit foundations and interested donors.

Since we expect our network to continue to grow over time in both connections and content we are initially planning to run a minimum of 12 strands of fiber to our rural hospital locations. This will be more fiber than initially needed, but the system is expected to grow into this over time. As a result, Erlanger Health System is anticipating leasing some of the excess fiber on an interim basis to generate revenue and services to fund the operation and maintenance cost of the rural healthcare fiber network. Initial discussions with local non-profit utility systems indicate this is feasible. This would be critical to sustaining the network in the early years of operation after the pilot program while network applications and network traffic builds to an expected self sustaining volume. Erlanger staff members are presently researching other models to determine appropriate ways to charge for products and services that are a function of the network.

10. Provide detail on how the supported network has advanced telemedicine benefits.

Clearly Erlanger Health System is continuing work on planning the physical and programmatic structure of the network. Funding of this pilot project and the on-going project planning has catapulted telemedicine to a visible opportunity in our regional medical community. The FCC grant has generated extensive discussion in the regional medical community on how best to use telemedicine to improve the quality of health care and drive down costs. Some of these applications are already developing through existing technology (see attached article 1) and are enjoying strong community editorial support in regional media (see attached article 2). Also as a direct result of this project one private medical group has already moved to raise foundation funding for delivery of telemedicine consultations through leased lines to remote rural residents for specialty needs in perinatology (see attached article 3). This particular example can provide new access in remote rural communities to specialized services needed to effectively deal with problem pregnancies which result in higher infant mortalities in the network service area. Plans are also being discussed for linking the level 1 trauma center specialists at Erlanger's Baroness Hospital in Chattanooga to the rural hospital emergency rooms for real time consultation and determination of treatment options.

Public Health Departments across the service area have also expressed an interest in linking with the network and have been collaborating in seeking additional funding to expand the planned network. In addition, potential opportunities are being discussed for using the network to manage stroke care.

As plans are further developed for the network, more regional opportunities for telemedicine applications will surface and will be reported in future quarterly reports.

11. Provide detail on how the supported network has complied with HHS and IT initiatives:

Since the network has not been constructed and is not operational at this time, this is not applicable. However staff involved with the Pilot project have participated in training sessions presented by HHS staff through USAC sponsored training and are continuing to learn more about these initiatives and the opportunities they present.

12. Explain how the selected participants coordinated in the use of their health care networks with the Department of Health and Human Services (HHS) and, in particular, with its Centers for Disease Control and Prevention (CDC) in instances of national, regional, or local public health emergencies (e.g. pandemics, bioterrorism). In such instances, where feasible, explain how selected participants provided access to their supported networks to HHS, including CDC, and other public health officials.

Since the network has not been constructed and is not operational at this time, this is not presently applicable.

Southeast Tennessee

Tennessee Digest

OCOEE

VA seeks delay 1 cleanup plan

The Tennessee Valley thority has asked for more ıe to submit a cleanup plan a sludge release on the oee River.
Thursday was the deadline Tennessee Department of ıironment and Conserva- ı gave TVA to say how it l clean up sediments that y contain heavy metals left r from decades of copper ıing and acid production.
TDEC spokeswoman Tisha abrese-Benton said TVA : with regulators in Knox- e on Thursday and asked a seven-day extension.
She said the request was ıg considered.
The sludge was released n TVA opened a gate on n No. 3 during a repair ect early in January. Sedi- ıt piled up more than 3 deep around the Ocoee itewater Center, but heavy s later washed the sludge ard Parksville Lake, inves- ors said.

CLEVELAND

'O plans forum sales tax vote

he Cleveland High School ı is hosting two infor- onal meetings Tuesday erning the March 10 ref- dum on the proposed city tax increase.
he meetings are set for ı and 7 p.m. in the Cleve- High School library.
ity Manager Janice el, city school board bers and principal Chuck holt will answer ques- and present information

Technology links large, small hospitals

Online: Hear Hale Booth explain telemedicine. Comment.

By Joan Garrett
jgarrett@timesfreepress.com

Rural residents far from city hospitals soon will be able to connect with distant specialists through new equipment that transmits information electronically.

Economic development agencies and Southeast Tennessee hospitals have been awarded millions in grant dollars to develop a system that will connect health providers such as the Copper Basin Medical Center in Copperhill, Tenn., with Erlanger Health System based in downtown Chattanooga, officials said.

"The availability of health care in rural areas is very vital to the economic growth of our area," said Hale Booth, vice president of Brightbridge, a nonprofit economic development organization that works in Southeast Tennessee.

Erlanger Health System, with assistance from Brightbridge, was awarded a $2.2 million grant from the Federal Communications Commission in December 2007 to help build a fiber network that would link to the rural nonprofit hospitals.

The capacity to share digital test results to aid diagnoses is known as telemedicine.

A $350,000 grant from the U.S. Rural Development Administration in September was designated to buy telemedicine equipment, which allows doctors to transport scans and X-rays electronically.

The Copper Basin Medical Center won a $280,000 grant from the Appalachian Regional Commission to buy digital radiology equipment that can send information to other hospitals or specialists for review, said David Hyatt, the hospital's interim CEO.

Staff Photo by Margaret Fenton

Dr. R. Kent Hutson, director of radiology at Erlanger hospital, looks through digital images of a spine MRI sent from one of 28 hospitals in the region.

TELE-LINKED

Hospitals that will be connected through telemedicine:

- Copper Basin Medical Center
- Rhea Medical Center
- Erlanger Bledsoe Campus
- North Valley Medical Plaza
- Erlanger Health System

Source: Hale Booth

UP AND RUNNING IN MARCH

The partnership will be up and running in March, Mr. Hyatt said. Brightbridge plans to apply for an additional grant through the U.S. Department of Agriculture, but Mr. Booth said he did not know how much will be requested.

Mr. Hyatt said the number of retirees around Copperhill has grown, increasing the need for medical services.

With the developing partnership with area hospitals, the Copper Basin Medical Center will have access to cardiologists and other doctors who understand the medical challenges of the elderly, he said.

Also, the electronic connection between hospitals will help rural providers offer 24-hour care. If a radiologist at a rural hospital is off work or gone for the day, a radiologist at another hospital can be contacted, he said.

"We are located in a rural area and a lot of time we don't have access to specialists," he said. "A lot of people retire to this area, and they need good access to care."

Telemedicine equipment can transport voices and images and simulate an actual visit with a doctor, said Roger Forgey, senior vice president of regional operations and business development at Erlanger Health System.

This is important, said Mr. Forgey, because Erlanger has the only pediatric hospital, Level 1 trauma center and high-risk obstetrician and gynecologist in the 100-mile area around Chattanooga.

SYSTEM HELPS LARGE, SMALL FACILITIES

A partnership between large hospitals with a lot of resources and small, rural hospitals benefits everyone, he said.

It keeps rural hospitals from having to transfer all of their patients out of the community and it keeps larger hospitals from being overloaded.

Before they make the drive, patients can know whether they need to see a specialist in Chattanooga, he said.

"It ends up helping the whole system," said Mr. Forgey. "It ends up becoming a safer system, a more accurate system and a more efficient system."

Bradley sheriff plans to seek 3rd District seat

Student accused of school fire

15-year-old faces felony charges for blaze at McMinn County High

of a fire in the hallway of the foreign language department, according to a report by Deputy Kimble Hyde.

ATTACHMENT 2

Chattanooga Times

Established 1869 Adolph S. Ochs, Publisher 1878-1935

EDITORIALS

The benefits of telemedicine

Access to adequate health care is one of the nation's most pressing problems. It is an especially urgent problem in rural areas where relatively few physicians practice, specialists are rare and hospitals are small. Telemedicine promises to help resolve those problems in areas like Southeast Tennessee.

Telemedicine allows medical information to be electronically passed safely and securely from one site to another. It provides a connection between rural physicians and hospitals, and specialists and large hospitals in metropolitan areas. The benefit of such a link is substantial. Telemedicine can save lives and improve the quality of care for patients who otherwise would have to travel long distances to receive specialized services.

Economic development groups and hospitals in the region recently have won significant federal grants to underwrite an electronic network to serve the region. The initial grants will be used to connect the Copper Basin Medical Center in Copperhill, Tenn., to Erlanger Health Systems in Chattanooga.

The connection, funded by $2.2 million from the Federal Communications Commission and $280,000 from the Appalachian Regional Commission, will provide a swift and efficient link between providers at the Copperhill center and the Chattanooga hospital..

The service, expected to be operational in March, will be a godsend for those in Copperhill and, later, for residents in Rhea and Sequatchie counties when facilities there tie into the network. The connection will allow specialists in Chattanooga — cardiologists or high-risk obstetricians, for instance — to see images and to discuss symptoms in real time with physicians and patients many miles distant. That will enable health care providers at both ends of the electronic link to serve the public in a more efficient and economic manner.

If information transmitted electronically suggests a patient needs immediate care unavailable in a rural setting, transportation can be arranged quickly. Conversely, diagnosis and treatment plans often can be determined though electronic communication, thus saving an unnecessary trip to a specialist.

The electronic partnership between hospitals large and small is beneficial to patients and physicians in both rural and urban areas. When telemedicine works efficiently, it allows rural physicians and hospitals to keep and treat many of their patients at home. It also allows specialists to provide advice and treatment to those who otherwise would not have ready access to their services even as it reduces the number of unnecessary doctor visits and hospitalizations.

At a time when access to affordable medical care has reached the crisis level, any methodology that holds the promise of safe, accurate and efficient medical care at a reasonable cost is welcome. The telemedicine link that will tie Erlanger to smaller health providers in the region does just that.

ATTACHMENT 3

■ SEE PULITZER PRIZE-WINNING CLAY BENNETT'S CARTOON, B6. ■ WATER LOVERS MAY BE UP THE CREEK, B2.

Technology connects rural mothers-to-be to doctors in cities

STAFF PHOTO BY ANGELA LEWIS

Dr. Joseph Kipikasa looks at an ultrasound image of a Tullahoma, Tenn., patient while demonstrating a new telehealth project.

Online: Hear Dr. David Adair discuss the telehealth pilot program. Comment.

BY EMILY BREGEL
EBREGEL@TIMESFREEPRESS.COM

From nearly 60 miles away, Chattanooga obstetrician Dr. Joseph Kipikasa actually has a clearer view of the unborn baby's heart chambers than if he were in the same city as the expectant mom, he said on Monday.

"It's actually an improvement" over typical sonogram equipment, said Dr. Kipikasa, referring to the 46-inch, high-definition monitor.

From the Regional Obstetrical Consultants office on McCallie Avenue, the monitor allows him to view both the fetus and expectant mother in Tullahoma, Tenn.

The new monitoring technology is part of a pilot project geared to connect mothers-to-be in remote parts of East Tennessee with specialists in Chattanooga and Knoxville. On Monday during a mock examination with Amy Taylor, a real patient at the Harton Regional Medical Center in Tullahoma, local high-risk obstetricians demonstrated what they say are the life-saving capabilities of the project.

"This technology is going to allow us in the East Tennessee region to essentially have

See TECH, Page B8

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Tech

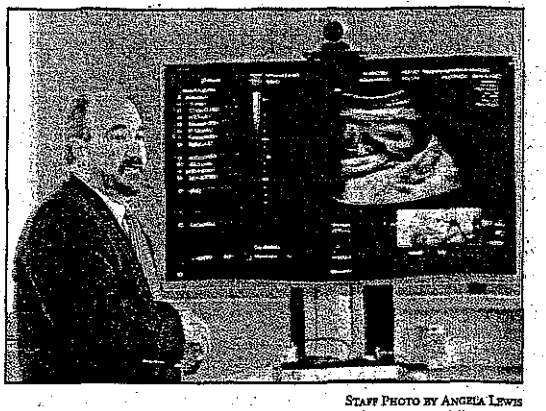
• Continued from Metro

high-risk obstetrical care delivered to these hospitals and these practices on a 24-hour, seven-day-a-week basis," said Dr. David Adair, founder of Regional Obstetrical Consultants, to a group gathered for the demonstration.

The three-year pilot project is funded by a $1.8 million grant from the BlueCross BlueShield of Tennessee Foundation. The grant adds 11 rural sites to a network of 55 sites already linked to specialists through the nonprofit Community Health Network's telehealth network. Community Health Networks, based in Oakdale, Tenn., aims to improve health care in medically underserved areas of Tennessee.

"People in rural areas can now easily access the specialists in the city ... without driving any further than they would for a local doctor's visit," said Keith Williams, chief executive officer of the Community Health Network.

Regional Obstetrical Consultants is one of three "hubs" that have the equipment to reach rural patients at those 11 sites, in addition to Erlanger hospital and the University of Tennessee Medical Center in Knoxville, Dr. Adair said.



STAFF PHOTO BY ANGELA LEWIS

Dr. David Adair talks about an ultrasound of a patient while demonstrating the capabilities of a telehealth project.

There are only about 30 high-risk obstetricians in the state, but with the growing telehealth network, those specialists can reach patients in half the state's counties, Dr. Adair said.

The BlueCross foundation is focusing on improvements in neonatal health, said Dr. Steve Coulter, president of government and emerging markets for BlueCross.

In Tennessee, the rate of low birth weight babies is nine per 1,000, and for black mothers it's 17 per 1,000, he said.

"That's an embarrassment to all of us," he said.

Tennessee ranks 45th in its rates of low birth weight babies, said Leslie Ladd, state director of the March of Dimes, who attended Monday's demonstration in Chattanooga.

"We have access to care problems with all the rural communities. There are so many without an (obstetrician) at all," she said. "This will address one of the key factors (in low birth weight births), which is the lack of coordination of care."